

**Notice of Allowability**

Application No.

10/772,401

Examiner

Vincent E. Kovalick

Applicant(s)

KUDO ET AL.

Art Unit

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's Patent Application, Serial No. 10/772,401 dated 02/6/04.
2. ☒ The allowed claim(s) is/are 1-11.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 02/06/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### DETAILED ACTION

1. This Office Action is in response to Applicant's Patent Application, Serial No. 10/772,401 with a File Date of February 6, 2004.

The Application is found to be in a condition for allowance as set forth hereinbelow.

#### *Allowable Subject Matter*

2. Claims 1-11 are allowed.

Relative to claims 1 and 7, the major difference between the teachings of the referenced prior art (USP 6,643,124, Wilk; USP 6,496,174, Kurumisawa et al. and Pub. No. US 2002/0183099, Lee) and that of the instant invention is that said referenced prior art **does not teach** a display apparatus including a plurality of display panels comprising: a data driver which applies a tone voltage to display elements of said display panels, said tone voltage corresponding to display data from an outside processor, and a scan driver which selects, on each line basis of said display panels, said display elements to which a tone voltage should be applied, wherein said data driver is common to said plurality of display panels, and wherein said data driver applies said tone voltage to display elements of some of said plurality of display panels, said tone voltage corresponding to said display data from said outside processor, and further applies a tone voltage to display elements of the other display panels of said plurality of display panels during a vertical blanking time-period of some of said plurality of display panels, said tone voltage corresponding to black data or white data; or, said tone voltage corresponding to predetermined display data which differs from said display data from said outside processor.

Regarding claim 10, the major difference between the teachings of the said referenced prior art and that of the instant invention is that said referenced prior art **does not teach** a display apparatus including a plurality of display panels comprising: a generation circuit for generating a plurality of tone voltages; a selector for selecting a tone voltage from among said plurality of tone voltages, and applying said selected tone voltage to display elements of said display panels, said tone voltage corresponding to display data from an outside processor; and a scan drive for selecting, on each line basis of said display panels, said display elements to which said tone voltage should be applied, wherein said selector applies said tone voltage to display elements of some of said plurality of display panels, said tone voltage corresponding to said display data from said outside processor, and applies to tone voltage to display elements of the other display panels of said plurality of display panels, the luminance of said tone voltage being relatively low of said plurality of tone voltages, and wherein said scan driver selects said display elements of said other display panels during a vertical blanking time-period of some of said plurality of display panels.

Regarding claim 11, the major difference between the teachings of the said referenced prior art and that of the instant invention is that said referenced prior art **does not teach** a display apparatus including a plurality of display panels comprising: a data driver for applying a tone voltage to display elements of said display panels, said tone voltage corresponding to display data from an outside processor, and a scan driver for selecting, on each line basis of said display panels, said display elements to which said tone voltage should be applied, wherein said data driver is common to said plurality of display panels, and applies said tone voltage to display elements of some of said plurality of display areas, said tone voltage corresponding to said

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display data from said outside processor, and further applies tone voltage to display elements of the other display areas of said plurality of display areas, said tone voltage corresponding to black data or white data, and wherein, said scan driver selects said display elements of said other display areas during a vertical blanking time-period of some of said plurality of display areas.

### *Conclusion*

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U. S. Patent No.	6,643,124	Wilk
U. S. Patent No.	6,496,174	Kurumisawa et al.
U. S. Patent No.	6,262,704	Kurumisawa et al.
Pub. No.	US 2002/0183099	Lee

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***To Respond***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent E. Kovalick whose telephone number is 571-272-7669. The examiner can normally be reached on Monday-Thursday 7:30- 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Vincent E. Kovalick  
October 11, 2006



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